



AMETEK®

PACIFIC DESIGN TECHNOLOGIES, INC.

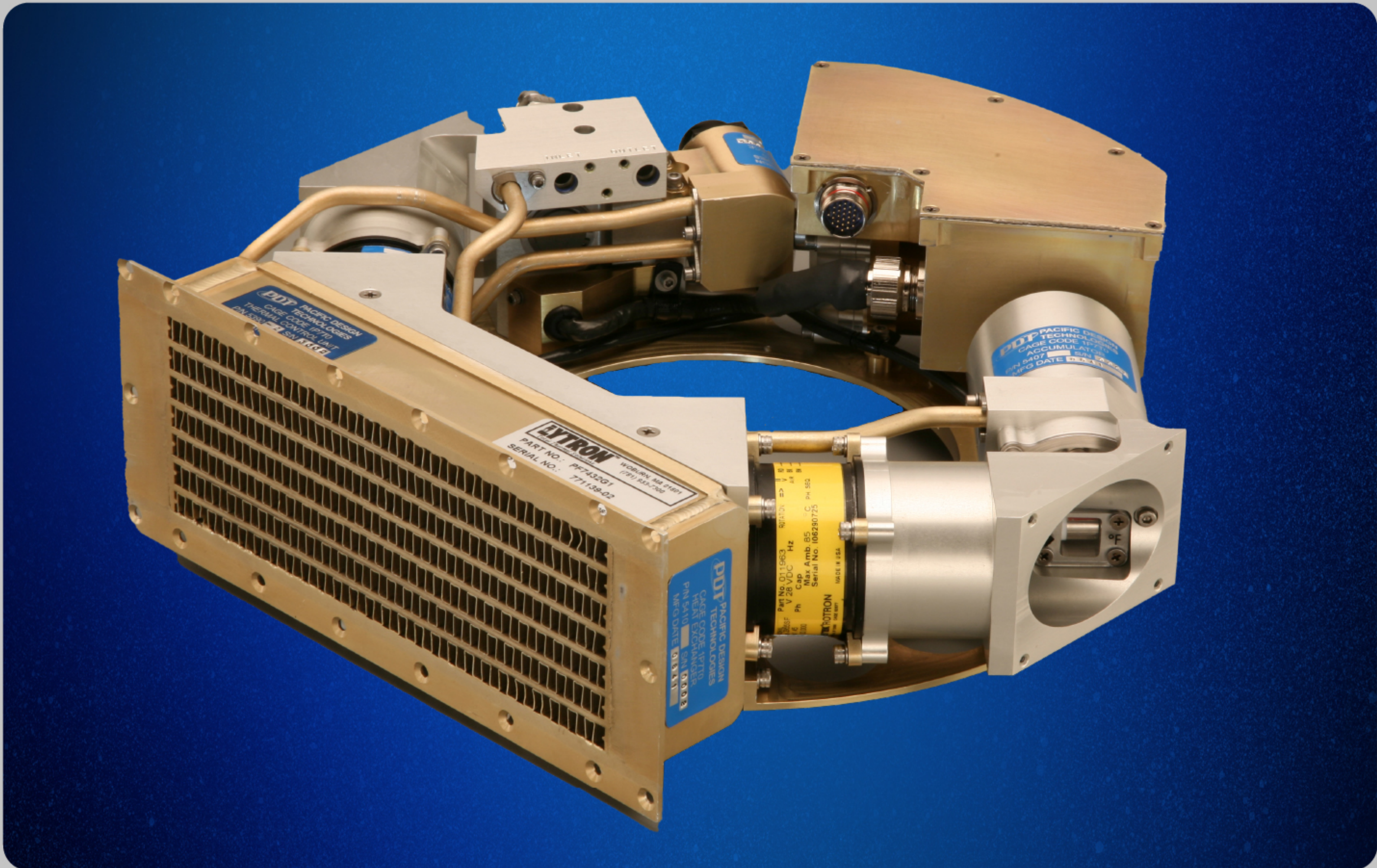
Thermal Management Solutions

Model 5390-2 Liquid Cooling System

Datasheet



Liquid Cooling System
PDT Model 5390-2



Hydraulic Schematic

Description

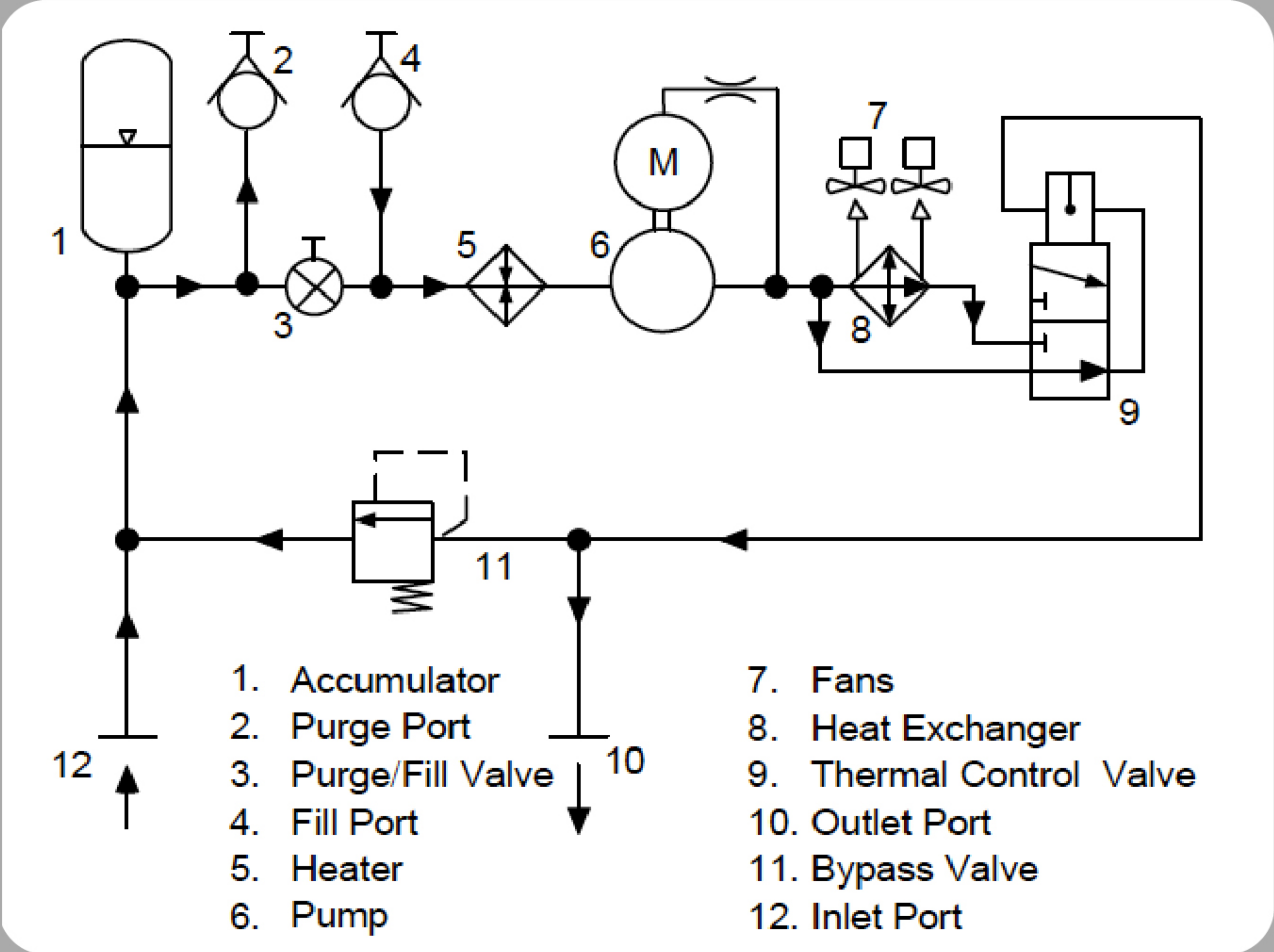
The PDT Model 5390-2 is a complete Liquid Cooling System (LCS) for an unmanned helicopter. This LCS provides coolant circulation for heat-generating equipment and a liquid-to-air heat exchanger for heat rejection. This LCS also includes an edge-welded bellows accumulator, thermal control valve, fans, heater, over-temp switch, purge/fill manifold, and an internal pressure relief valve. 5390-2 was designed to withstand various MIL-STD-810 conditions.

Specification
Pump Parameters

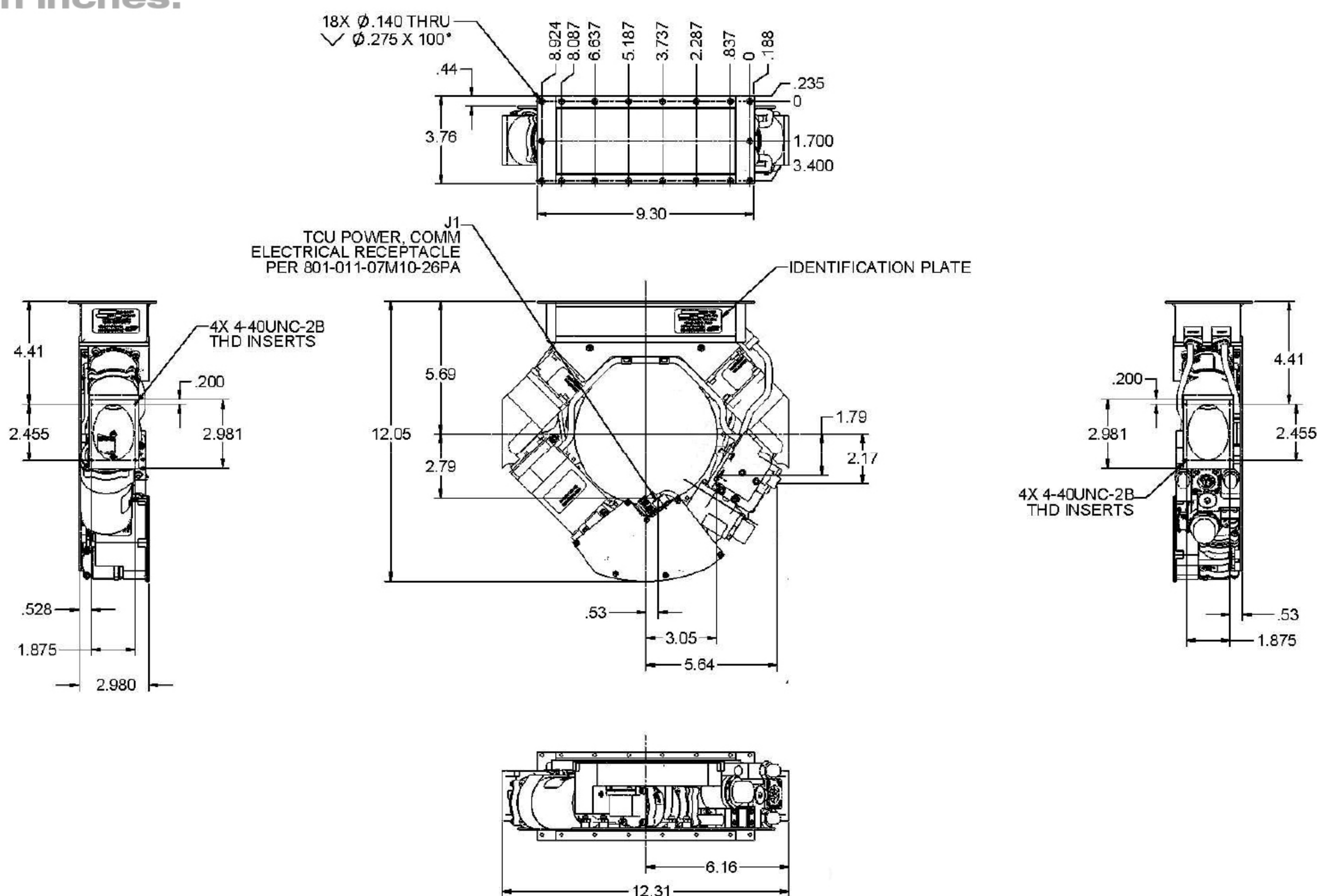
Fluid:	60/40 EGW
Pump Flow:	46 gpm @ 88 psid @ 45°C
Temperature Ranges:	Operating: -40°C to +85°C Storage: -55°C to +85°C Fluid: -40°C to +71°C
Operating Voltage:	270 VDC per MIL-STD-704
Input Power:	4700 Watts (max at rated conditions)
Pressure:	Proof: 165 psig Burst: 275 psig
Pump Type:	Centrifugal
Weight:	Dry: 16.8 lbs (max) Wet: 18 lbs (max)
Electrical:	Qualified to MIL-STD-461/MIL-STD-704 Integrated BLDC Motor Controller - Integrated Hardware/System Protection - POST/PBIT with many pump health signals - Accumulator level signal input AtoD

Liquid Cooling System
PDT Model 5390-2

Performance Graph



Outline
Dimensions are in inches.





PACIFIC DESIGN TECHNOLOGIES, INC.
59 South La Patera Ln., Goleta, CA 93117
Phone 805-961-9110 • Fax 805-961-9120
Email info.pd-tech@ametech.com
www.pd-tech.com

Our people are part of our product.